Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of configuring a communications path in a communications network from a start node to an end node through a plurality of intermediate nodes, said method comprising:

establishing a partial path for said communications path using at least one communications link associated with a first routing scheme from said start node to a terminating node in said plurality of intermediate nodes; and

at said terminating node, if another communication link associated with the first routing scheme to a next-hop node towards the end node does not exist in said plurality of intermediate nodes, then

establishing said terminating node as an interim egress node for said communications path;

notifying said start node of mapping parameters for said partial communications path to the terminating node;

initiating establishment of a secondary communications path associated with another routing scheme differing from said first routing scheme from said terminating node to said end node through at least one node downstream from said terminating node in said plurality of intermediate [[of]] nodes; and

notifying said start node of parameters for said secondary communications path to the end node after establishment of the secondary communications path,

wherein the partial communications path and the secondary communications path combine to form the communications path from the start node to the end node.

2. (Previously Presented) The method as claimed in claim 5 wherein said establishing-said partial path is performed on a node by node basis, and the first routing scheme follows a multi-protocol label switching (MPLS) routing scheme.

3. (Previously Presented) The method as claimed in claim 2 wherein the another routing scheme is IP forwarding.

4. (Previously Presented) The method as claimed in claim 3 wherein the another routing scheme is IP forwarding without using MPLS.

5. (Previously Presented) The method as claimed in claim 1 wherein said mapping parameters comprise a hop count associated with said partial path.

6. (Previously Presented) A method of establishing a signalled label switched path (SLSP) in a multi-protocol label switching (MPLS) communications network wherein each router thereof has at least one label distribution protocol (LDP) peer router, said method comprising:

executing a packet routing task on each router in accordance with a packet routing protocol so as to enable each router to forward a data packet to a next-hop router based on a network address carried by the data packet;

storing, on each router, a list of SLSPs which egress at the router, each said SLSP being associated with a forward equivalency class (FEC) based on a network destination; and

in the event a given router identifies a new LDP peer router, traversing the corresponding list of egress SLSPs at the given router to identify the FEC corresponding to each listed SLSP, requesting the next-hop router from said routing task for each said FEC, and in the event said routing task identifies the next-hop router for a given one of said FECs to be said new LDP peer router, extending the corresponding listed SLSP to said new LDP peer router from said given router.

7. (Original) A method of establishing a signalled label switched path (SLSP) in a multi-protocol label switching (MPLS) communications network wherein each router thereof has at least one label distribution protocol (LDP) peer router, said method comprising:

signalling the establishment of said SLSP across said network from an ingress router to an egress router;

storing on said egress router an indication that said SLSP egresses thereat, said SLSP being associated with a forward equivalency class (FEC) based on a network address;

executing a packet routing task on said egress router, said routing task enabling said egress router to forward a data packet to a next-hop router based on a network address carried by the data packet; and

in the event said egress router identifies a new LDP peer router subsequent to the establishment of said SLSP, extending said SLSP to said new LDP peer router provided that said routing task indicates that the next-hop router for said given FEC is said new LDP peer router.

8. (Currently Amended) A router for use in a communications network, said router comprising:

one or more input ports for receiving packets from said network and one or more output ports for transmitting packets to said network;

packet routing logic for enabling the router to identify a next-hop router for forwarding a data packet based on a network address carried by said packet;

switching logic for enabling packets to be switched between said input ports and said output ports based on a label carried by each packet;

signalling logic for enabling a signalling link to be established with a signalling peer router, said signalling link being used to establish a bearer channel link for a signalled label switched path (SLSP); and

multi-protocol label switching (MPLS) routing logic for storing a list of SLSPs which egress at the router and for associating each said SLSP with a forward equivalency class (FEC) based on a network destination [[;]] ,

wherein said signalling logic informs said MPLS routing logic when a new signalling link is established to a new signalling peer router and in response thereto said MPLS routing logic (a) traverses the list of egress SLSPs to identify the FEC corresponding to each listed SLSP, (b) requests the next-hop router from said packet routing logic for each said FEC, and (c) extends the corresponding listed SLSP to the new signalling peer router provided that (d) said packet routing logic identifies the next-hop router to be said new signalling peer router.

9. (Currently Amended) A router for use in a multi-protocol label switching (MPLS) communications network, the router comprising:

packet routing logic for identifying a next-hop router for forwarding a data packet [[to]] based on a network destination carried by the packet, the packet routing logic being operative to change the identities of the next hop-routers from time to time for various network destinations;

signalling logic for establishing a signalling link with a signalling peer router, the signalling link being used to establish a bearer channel link for a signalled label switched path (SLSP); and

MPLS routing logic operative to store (i) a first list of signalling links to signalling peer routers and (ii) a second list of SLSPs transiting the router, each such transit SLSP being associated with a network destination [[;]] ,

wherein if the packet routing logic informs the MPLS routing logic of a new next-hop router for a given network destination, said new next-hop router being different from an old next-hop router for the given network destination, and in response thereto the MPLS routing logic determines from the second list whether a transit SLSP is associated with the given network destination, then the MPLS routing logic instructs the signalling logic to establish a bearer

channel link for the corresponding transit SLSP to the new next-hop router provided that the first list indicates that a signalling link exists between the router and the new next-hop router.

10. (Previously Presented) A method of routing a signalled label switched path (SLSP) in a multi-protocol label switching (MPLS) communication network having a plurality of interconnected label-switching routers, the method comprising:

executing a packet routing task on each router in accordance with a packet routing protocol so as to enable each router to forward a data packet to a next-hop router based on a network address carried by the data packet, the packet routing protocol being operative to vary from time to time the identities of the next hop-routers for various network destinations;

executing a label distribution task on each router in accordance with a label distribution protocol (LDP) so as to enable each router to signal path establishment messages with an LDP peer router over a signalling link;

storing, on each router, (i) a first list of LDP signalling links to peer routers and (ii) a second list of SLSPs transiting the router, each such transit SLSP being associated with a network destination; and

in the event the packet routing task associated with a given router identifies a new next-hop router for a given network destination, said new next-hop router being different from an old next-hop router for the given network destination, determining from the second list that a particular transit SLSP is associated with the given network destination and, provided that the first list indicates that an LDP signalling link exists between the given router and the new next-hop router, signalling a path establishment message to progress the particular transit SLSP to the new next-hop router.

11. (Currently Amended) A method of operating multi-protocol label switched path (MPLS) communications network having a plurality of interconnected nodes, the method comprising:

executing a packet routing task on each node in accordance with a packet routing protocol so as to enable each node to forward a data packet to a next-hop node based on a network address carried by the data packet [[,]] ;

executing a signalling task on each node in accordance with a signalling protocol so as to enable each node to signal the establishment of bearer channel links for signalled label switched paths (SLSPs) with another node over a signalling link;

storing, on each router, (i) a first list of signalling links to signalling peer nodes and (ii) a second list of SLSPs transiting the node, each such transit SLSP being associated with a network destination; and

in the event the packet routing task associated with a given node identifies a new next-hop node for a given network destination, said new next-hop router being different from an old next-hop router for the given network destination, determining from the first second list that a particular transit SLSP is associated with the given network destination and, provided that the first list indicates that a signalling link exists between the given node and the new next-hop node, signalling a request to establish a bearer channel link with the new next-hop node in order to progress the particular transit SLSP thereto.

12. (Previously Presented) The router of claim 9, wherein:

the router communicates packet routing protocol messages and signalling protocol messages with a second router over a common physical interface;

the packet routing logic indicates a first communication failure over the common physical interface with the second router after a first predetermined time period has elapsed without a predetermined event having occurred;

the signalling logic indicates a second communication failure with the second router after a second predetermined time period has elapsed without the predetermined event having occurred; and

the first time period is shorter than the second time period.

13. (Original) The router according to claim 12, wherein:

in the event the second communications failure is indicated, the MPLS routing logic signals the release of SLSPs associated with a particular signalling link using the common physical interface, and

the relative durations of the first and second time periods are selected so as to enable the packet routing logic to select a new next-hop router for data packets formerly forwarded to the second router prior to the release of one or more SLSPs associated with the particular signalling link.

14. (Original) The router according to claim 13, wherein the predetermined event is the reception of a protocol message from the second router.

15. (Previously Presented) The method of claim 6, wherein said extending the corresponding listed SLSP to the new LDP peer router includes updating the lists of SLSPs at the given router and the new router with information relating to the corresponding listed SLSP.

16. (Previously Presented) The method of claim 7, wherein said extending said SLSP to said new LDP peer router includes storing on said new LDP peer router another indication that the SLSP egresses thereat.

17. (Previously Presented) The router of claim 8, wherein said signalling logic extends said corresponding SLSP to the new signalling peer router by storing, on the new signalling peer router, information relating to the corresponding SLSP on a list of SLSPs.

18. (Previously Presented) The router of claim 9, wherein after the establishment of the bearer channel link for the corresponding transit SLSP to the new next-hop router, the old next-hop router is no longer used to transit the corresponding transit SLSP.

19. (Currently Amended) The method [[router]] of claim 10, wherein after the particular SLSP is progressed to the new next-hop router, the old next-hop router is no longer used to transit the particular transit SLSP.

20. (Currently Amended) The method of claim 11, wherein after the bearer channel link with the new next-hop node is established, the old next-hop node is no longer used to transit the particular [[transi]] transit SLSP.